

The Honorable Commissioner of Patents
and Trademarks

Page 5

REMARKS

The present application contains claims 1 to 11.

Applicant has amended claims 1 and 7 to include the limitation "wherein said encrypted acceleration tunnel and said ~~VPN acceleration server utilized same network layer in a standard OSI model~~ is a non-VPN tunnel" to better define the present invention. Support for the amendment may be found, for example, at page 11, lines 11-13, "the VPN tunnel is only established over the Internet, and not over the Air Interface of the wireless network", at page 10, lines 15-17, "the VPN tunnel [164] terminates on the enterprise side of the VPN acceleration server [160] in the wireless network [108¹], as opposed to traversing the wireless network [108¹] as in the prior art CPE-VPN of FIG. 1"; at page 8, lines 13-16 and at page 9, lines 4-6.

Claim Objections

Applicant has amended claim 1 to correct the clerical error identified by the Examiner.

Amendment to claims 1 and 7 further renders the Examiner's objection to "utilize same" moot.

Claim Rejection under 35 USC §103

The Examiner rejected claims 1-11 under 35 U.S.C. 103(a) as being unpatentable over Chuah et al. (US Patent 6,496,491) hereinafter referred as Chuah, and in view of Gleeson et al., (US Patent No. 5,446,736), hereinafter referred as Gleeson.

Applicant respectfully requests reconsideration and withdrawal of this rejection in view of the amendments made herein and the following comments.

Applicant provided arguments in a Response to an Office Action, filed on June 5, 2006, hereinafter referred to as R1 as to why Chuah and Gleeson, alone or in combination does not teach or suggest the claimed invention.

The Honorable Commissioner of Patents
and Trademarks

Page 6

Encrypted acceleration channel not a VPN channel

Applicant stated in R1:

"Chuah therefore does not teach or suggest establishing 'an encrypted acceleration tunnel between a VPN acceleration client and a VPN acceleration server' as claimed by the present application. As stated throughout the disclosure, for example at page 11, lines 10 to 13, the encrypted acceleration tunnel over the air interface is not a VPN channel, and therefore does not have the problem of dropped VPN connection due to coverage issues." [emphasis added]

Examiner was silent on this point in the Final Office Action.

"Teach-Away" by Chuah

Applicant stated in R1:

"Therefore, Chuah clearly teaches away from the present invention by establishing a direct VPN connection between the client 805 and the NAS server 815, and introducing new control messages (column 9, lines 6 to 41) for hand-off between servers, as compared to the claimed invention of the present application by using an encrypted acceleration tunnel between a VPN acceleration client and a VPN acceleration server. [emphasis added]

In the "Response to Arguments" in the Final Office Action mailed August 22, 2006, the Examiner stated "that Chuah cannot possibly teach away from the claimed invention when both Chuah and the claimed invention detail the steps of establishing VPN communications between a wireless device and an enterprise network."

It appears to be that the Examiner misinterpreted the claimed invention.

In Chuah, as stated by the Examiner, a VPN connection from the wireless device 805 to element 815 is established. In contrast, in the claimed invention "an encrypted acceleration tunnel between a VPN acceleration client and a VPN acceleration server" is established. As stated in R1 and discussed above, the encrypted acceleration tunnel over the air interface is not a VPN channel, and therefore "one can ensure VPN

The Honorable Commissioner of Patents
and Trademarks

Page 7

permanence as the problem of dropped VPN connections due to coverage issues, is avoided" (page 11, lines 13-14).

In other words, the present invention uses an encrypted non-VPN tunnel between a VPN acceleration client and a VPN acceleration server to overcome the problem of dropped VPN connections, while Chuah uses a VPN tunnel and new control messages to address the hand-over of the existing PPP connection from one switching element to another. Therefore, Chuah does teach a complete different approach to an arguably similar problem.

Gleeson 's additional layer in an OSI model

Applicant stated in R1:

"Gleeson teaches the insertion of an additional optimization layer into the protocol stack between the existing layers. The exact location of this additional optimization layer is defined (column 9, lines 19 -21). As stated at column 4, lines 1 to 4, the *"data packet stream passing through the standard protocol stack is converted in the optimization layer"*. As described for example, at column 13, line 23 to column 14, line 59, and in Figure 11, the optimization layer of Gleeson introduces new header, new fields, and require the conversions at both client and server sides. [emphasis added]

In the Office Action mailed March 3, 2006, and again at page 6 of the Final Office Action mailed on August 22, 2006, the Examiner stated that the optimization layer of Gleeson, which is sandwiched between the existing network and datalink layers, to the "acceleration" of the present application.

This is not correct.

The "acceleration" of the present invention is directed to various wireless communication performance optimization techniques as stated throughout the specification, for example, at page 3, lines 5-13:

"The prior art CPE-VPN described above has a number of drawbacks that limit its use for the secure transfer of electronic information. One of the major drawbacks is its inability to utilize various wireless communication performance optimization

The Honorable Commissioner of Patents
and Trademarks

Page 8

techniques including compression, protocol optimization, caching, and traffic management. Collectively the application of these techniques to a wireless signal can be referred to as signal "acceleration." As will be apparent to one skilled in the art, it is the acceleration server [120] that applies these acceleration algorithms to the signal to improve the performance of the data flow over the bandwidth limited wireless connection. "[emphasis added]

at page 8, lines 7-12; and at page 10, lines 18-21.

The Examiner further stated that "the 'acceleration' is performed by using transmission optimization techniques in the network layer".

This is not correct.

Applicant stated at page 4, line 21 to page 5, line 3:

"As mentioned above, the major drawback of traditional CPE-VPNs is their inability to accelerate a secure tunnel transmission over the wireless network. The reason the CPE-VPNs cannot accelerate such secure tunnel transmissions because the aforementioned optimization performance techniques operate on the transport layer and up (fourth layer) of the OSI standard, whereas the encryption occurs on the network layer (third layer). That is to say, the signal cannot be accelerated as it bypasses the acceleration server [120] in a lower layer encrypted tunnel." [emphasis added]

In fact, "accelerating and encrypting by said VPN acceleration server and transmitting said required data to said VPN acceleration client" is one aspect of the present invention to overcome the major drawback of traditional CPE-VPNs.

Motivation for Combination of Chuah and Gleeson

As stated above, Applicant's claimed invention includes an encrypted acceleration tunnel which is a non-VPN tunnel; Chuah teaches a different approach to solve the "hand-off" problem; and Gleeson teaches an additional optimization layer unrelated to wireless communication performance optimization techniques.

The Honorable Commissioner of Patents
and Trademarks

Page 9

In order to set forth a *prima facie* case of obviousness under 35 U.S.C. § 103(a), there must be (1) some teaching, suggestion or incentive supporting the combination of cited references to produce the claimed invention (*ACS Hospital Systems, Inc. v. Montefiore Hospital*, 732 F.2d 1572, 1577, 221 USPQ 329, 933 (Fed. Cir. 1984)); and (2) the combination of the cited references must actually teach or suggest the claimed invention.

Further, that which is within the capabilities of one skilled in the art is not synonymous with that which is obvious. *Ex parte Gerlach*, 212 USPQ 471 (Bd. APP. 1980). Obviousness is tested by "what the combined teachings of the references would have suggested to those of ordinary skill in the art." *In re Keller*, 642 F.2d 413, 425, 208 USPQ 871, 881 (CCPA 1981), but it cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination (*ACS Hosp. Systems, Inc. v Montefiore Hosp.* 732 F.2d 1572, 1577. 221 USPQ 329, 933 (Fed. Cir. 1984)). "To imbue one of ordinary skill in the art with knowledge of the invention in suit, when no prior art reference or references of record convey or suggest that knowledge, is to fall victim to the insidious effect of a hindsight syndrome wherein that which only the inventor taught is used against its teacher" *W.L. Gore & Associates, Inc. v. Garlock Inc.*, 721 F.2d 1540, 1553, 220 USPQ 303, 312-13 (Fed. Cir. 1983).

Under 35 U.S.C. §103, in order to set forth a case of *prima facie* obviousness the differences between the teachings in the cited reference must be evaluated in terms of the whole invention, and the prior art must provide a teaching or suggestion to the person of ordinary skill in the art to have made the changes that would produce the claimed product. See, e.g., *Lindemann Maschinen-fabrik Gmbh v. American Hoist and Derrick Co.*, 730 F.2d 1452, 1462, 221 U.S.P.Q.2d 481, 488 (Fed. Cir. 1984). The mere fact that prior art may be modified to produce the claimed product does not make the modification obvious unless the prior art suggests the desirability of the modification. *In re Fritch*, 23 U.S.P.Q.2d 1780 (Fed. Cir. 1992).

MPEP 2143 states:

The Honorable Commissioner of Patents
and Trademarks

Page 10

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference . . . must teach or suggest all the claim limitations.

In addition, if the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. *In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959).

"inherent, see below"

The Examiner marked several limitations in the independent claims as "inherent, see below", and stated that "[c]ommunications in a Virtual Private Network must necessarily be encrypted to protect the privacy of the network". However, at least, this is insufficient to render the last two limitations of claim 1 as inherent to VPN.

Decrypting the required data at the VPN acceleration server; accelerating and encrypting by the VPN acceleration server and transmitting the required data to the VPN acceleration client is not inherent to a normal VPN operation, rather, it is a characteristic of sending data over a non-VPN encrypted acceleration tunnel.

Layers of the OSI Model

Applicant has deleted the new limitation introduced in claim amendment in R1, thus rendering the Examiner's comment moot. Applicant, however, wishes to point out that the layers of the OSI model, with the exception of layer 1 which by definition is a physical layer, are not divided based on the implementation in software or hardware. A person skilled in the art would readily understand that the functions of layers 2 to 7 of OSI model could be implemented in hardware.

Dependent Claims

Applicant notes that the dependent claims are inventive at least by virtue of their

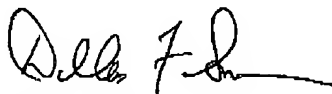
The Honorable Commissioner of Patents
and Trademarks

Page 11

dependencies.

Applicant respectfully requests reconsideration of this application, based on the foregoing amendments and remarks.

Respectfully Submitted,



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